

STRATEGY RESEARCH PROJECT

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PROMOTING ENVIRONMENTAL SECURITY DURING CONTINGENCY OPERATIONS

BY

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ABSTRACT

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The US military has been involved in numerous contingency operations since the end of the cold war and the trend is likely to continue. At the same time, environmental problems have been recognized as a threat to national security. Although the military has been active both domestically and at its overseas installations in helping to achieve environmental security, little has been said or done about resolving environmental issues that arise during contingency operations. Drawing on the experience of Operation Uphold Democracy in Haiti, this paper argues that there must be improved recognition of environmental issues, appropriate assignment of responsibility to deal with these issues as part of the interagency process, and adequate resourcing of deploying military forces. Adopting this methodology will allow US forces to serve as an environmental role model during contingency operations and enhance resolution of environmental problems that affect the stability and security of the host country. Finally, while there is always a danger of mission creep, joint force commanders should be provided with sufficient Humanitarian and Civic Assistance funds to pursue projects they consider vital to creating a stable and secure environment.

PROMOTING ENVIRONMENTAL SECURITY DURING CONTINGENCY OPERATIONS

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PROMOTING ENVIRONMENTAL SECURITY DURING CONTINGENCY OPERATIONS

INTRODUCTION

There is also a new and different threat to our national security emerging--the destruction of our environment. The defense establishment has a clear stake in this growing threat ... one of our key national security objectives must be to reverse the accelerating pace of environmental destruction.

Senator Sam Nunn (D-GA), Senate floor speech, June 28, 1990

The effect of environmental problems on national security, now commonly referred to as "environmental security," is important to the US military. The concept first appeared in the 1991 National Security Strategy (NSS), when President Bush recognized that the failure to competently manage natural resources could contribute to potential conflict.¹ The 1993 National Security Strategy echoed this concern and included the environment as an element of economic power.² When *A National Security Strategy of Engagement and Enlargement* was published in February 1996, it amplified the importance of the environment as a component of United States national security even further.³ The 1996 NSS recognizes that competition for natural resources "is already a very real risk to regional stability around the world."⁴ It also states that national and international environmental degradation poses a direct threat to economic growth and to global and national security.⁵ Thus, as one of the institutions charged with protecting our national security, the US military also should be concerned with all aspects of environmental security.

Most discussion of the US military role in environmental security has focused on domestic environmental initiatives that are designed to cure past environmental ills, reduce future adverse environmental effects, or use a portion of our military “know how” to solve environmental problems.⁶ Military environmental considerations outside the US have generally been limited to efforts to resolve or avoid significant environmental problems at US overseas installations and facilities.⁷ There has been little discussion of the role the military can or should play in promoting environmental security during contingency operations. Yet based on the experience of the past few years, these operations are likely to be the most frequent type of non-training events undertaken by military forces.

The thesis of this paper is that environmental security considerations are an important part of contingency operations even though most environmental laws, regulations and policies that govern military activities are not directly applicable to military forces engaged in contingency operations. Military deployments abroad can trigger a number of environmental issues, both from actions of the force involved and from problems in the host country, that can significantly impact on mission accomplishment. This paper starts with a brief examination of the present US environmental security strategy and why it is important to national security. It then discusses current military implementation of that strategy and identifies some of the environmental issues that can arise during contingency operations. Finally, the paper addresses some of the problems that can prevent timely

resolution of these issues and provides recommendations that would enhance both environmental security strategy during contingency operations and the ability of US forces to accomplish their contingency mission.

US ENVIRONMENTAL SECURITY STRATEGY IN THE 21st CENTURY

The range of environmental risks serious enough to jeopardize international stability extends to massive population flight from man-made or natural catastrophes, such as Chernobyl or the East African drought, and to large-scale ecosystem damage caused by industrial pollution, deforestation, loss of biodiversity, ozone depletion, desertification, ocean pollution and, ultimately, climate change.

1996 National Security Strategy⁸

Environmental issues can adversely influence our national security in two important ways. One of these is potential or actual conflict between nations or groups that can arise as a result of disputes over natural resources or transnational environmental problems. For example, future conflicts over water in the Middle East, desertification in Saharan Africa or fishing disputes over depleted marine resources are entirely foreseeable and represent potential threats to both global and national security. Somalia represents a historical example of how environmental problems can provide fertile ground for conflict, because if the anarchy in Somalia was not caused directly by the drought and agricultural devastation, it was certainly exacerbated by them.

A second way that environmental issues can directly affect national security is by destabilizing governments or institutions in a country afflicted with environmental

degradation. Haiti is a good example. As early as 1978, the President's Council on Environmental Quality noted that deforestation in Haiti was almost complete and then predicted that social disruption and instability would soon follow.⁹ It took 16 more years and a military overthrow of duly elected President Aristide to spark renewed US military involvement in Haiti. However, it is clear that the environmental devastation of that country's forests, soil and water supplies created a cause and effect between environmental issues and Haiti's economic deprivation, massive migration and the basic instability of virtually every economic or governmental institution in the country.¹⁰

To deal with these two threats, US strategy on environmental security has been identified as requiring action in four separate dimensions: global, regional, bilateral and partnership with business and nongovernmental organizations.¹¹ Some US efforts must be global because environmental problems tend to be transnational and because environmental depletion in one part of the world invariably puts pressure on resources in other parts of the world.¹² Regional efforts are important because they attack environmental issues where they are most likely to increase tensions within and among nations, often leading to increased possibilities for US military involvement.¹³ The bilateral component of US strategy involves addressing problems that primarily involve only the US and another nation. Examples would be environmental agreements under the North American Free Trade Agreement and agreements dealing with acid rain from the US to Canada.¹⁴ Finally, businesses and nongovernmental organizations must participate

in formulating environmental solutions, both because solving environmental problems is good business and because transnational companies and nongovernmental organizations have become increasingly powerful forces in the global community.

MILITARY IMPLEMENTATION OF US ENVIRONMENTAL STRATEGY

This Administration wants the United States to be the world leader in addressing environmental problems and I want the Department of Defense to be the Federal leader in agency environmental compliance and protection.

Richard Cheney, Secretary of Defense, October 10, 1989

For the most part, the US military's role in implementing our environmental security strategy has been confined to domestic environmental compliance and sensitivity to environmental issues at overseas installations significantly affected by major federal actions. Compliance with US domestic law has occupied a large portion of the Department of Defense's (DOD) attention because the military controls large areas of the public domain in the United States.¹⁵ It has been well documented that these areas contain a vast array of environmental problems, opportunities and challenges.¹⁶ Given this visibility and the increased environmental sensitivity on the part of the American public, it is entirely understandable that initial DOD efforts have focused on compliance, restoration, prevention and conservation. Thus, the present overall DOD environmental security mission has been stated as: (1) compliance with the law, (2) supporting military readiness by ensuring continued access to the air, land and water needed for training and

testing, (3) improving the quality of life for military personnel by protecting them from environmental hazards and maintaining the quality of military facilities, and (4) contributing to weapons systems that have lower cost, better performance and better environmental characteristics.¹⁷

DOD has also focused on domestic environmental problems because the vast majority of US environmental laws, rules and regulations have little extraterritorial application. Although the transnational effects of many environmental problems have led some groups to ask US courts to apply domestic environmental laws abroad, there is a strong judicial presumption against application of most statutes outside of the United States unless there is a clear expression of Congressional intent to the contrary.¹⁸ This presumption is based on the dual rationale that Congress usually legislates with domestic concerns in mind and that domestic application of US law avoids unintended clashes between US law and the law of other nations which could result in international discord.¹⁹ Although some of these attempts to apply US environmental law abroad met with early success,²⁰ current law is that environmental legislation applies only when US activities have a significant impact upon interests inside the United States or in the global commons.²¹

DOD environmental activities overseas have generally been limited to fixed US installations and have excluded contingency operations. For example, Executive Order (EO) 12114 incorporates National Environmental Policy Act (NEPA)-like procedural

approaches to major federal actions overseas that could do significant harm to the environment.²² However, EO 12114 does not apply to armed conflict undertaken at the direction of the President or disaster and emergency relief operations.²³ Similarly, DOD Directive 6050.16,²⁴ which implements EO 12114, establishes a DOD environmental program at overseas installations through development of the Overseas Environmental Baseline Guidance Document (OEBGD).²⁵ Neither of these is generally applicable to contingency operations because such operations do not establish "DOD installations" as defined in these directives and DOD Directive 6050.16 excludes training or operational deployments off-base.²⁶

DOD is also in the process of developing an overseas restoration policy for OCONUS installations. This proposed process is likely be similar to the OEBGD in which country specific standards are developed by Executive Agents for installations that DOD will keep open. These standards are based on existing international agreements (like Status of Forces Agreements), host nation law, and domestic US law. It is also likely that DOD policy will continue to direct immediate remediation of environmental hazards emanating from a DOD overseas installation that pose an imminent danger to human health. Finally, as DOD continues to close its overseas bases, environmental problems at installations slated for closure will continue to be handled by negotiating a residual value of the buildings and property that includes a deduction for any environmental damage that may be present (a process that has been used extensively in Germany and which may

even have some application during contingency operations where US forces make major improvements to a host country site). None of these programs are directly applicable to actions during contingency operations, however, because they only apply to fixed DOD overseas installations using the OEBCD definition.

But if DOD can be said to have been the federal leader in domestic environmental programs and environmentally sensitive to problems at its fixed overseas installations, it has largely ignored the issue of how to handle environmental problems that arise during contingency operations. Present DOD guidance is limited to enjoining planners and commanders to be sensitive to potential environmental issues arising during deployments. The reason for leaving contingency operations out of the equation appears to be part of a larger reluctance on the part of DOD to confront the nation-building issue, of which addressing environmental issues would clearly be a part. This reluctance has as its source two factors: mission creep and lack of resources. Senior military and civilian leaders have been reticent to approve any significant degree of nation-building by contingency forces because they fear mission creep and long term entanglements that might adversely affect a quick exit strategy. Additionally, resolving some of these issues can be very expensive. It is also clear that some of these problems can affect both the ability of the US military to accomplish its short term mission of providing a secure environment and the long term stability of the host country, potentially risking the need for additional

intervention at some future point. The remainder of this paper argues that this kind of approach is short-sighted and should be changed.

ENVIRONMENTAL ISSUES DURING CONTINGENCY OPERATIONS

Protecting the environment has become steadily more important during the past several decades. The international community is increasingly vigilant in its oversight of the environmental consequences of military operations.

Operational Law Handbook, Chap 5: Environmental Law in Operations, 1996

Environmental issues can arise during contingency operations in two ways. First, the activities of US forces themselves can trigger environmental issues and concerns. In Haiti, for example, after the initial deployment of more than 20,000 troops had stabilized the security situation and led to the withdrawal of the 18th Airborne Corps headquarters, the commander of the 10th Mountain Division (Light) decided to develop a firing range so that his soldiers, and the soldiers of supporting units such as mechanized infantry that used M2 Bradley Fighting Vehicles, could remain tactically proficient. At the time, the length of the Haiti operation was unknown and it appeared unlikely that the peacekeeping nature of the mission would provide sufficient opportunities to retain weapons proficiency without a range. The site ultimately selected was an old Haitian Army range located a few miles outside of the Haitian capital of Port-au-Prince. After minimal improvements and removal of transient Haitians, use of the range began in the Fall of 1994.

When the 25th Infantry Division (Light) relieved the 10th Mountain in early January 1995, its units in and around Port-au-Prince continued to use the range, although some projects such as construction of a grenade tire-house were put on hold. As the March 31, 1995 date for mission handover to the United Nations Mission in Haiti (UNMIH) approached, personnel of the Tropic Lightning Division began to consider how to close the range. However, they quickly discovered that in using the old Haitian Army range the US had assumed the duty to make the range environmentally safe upon its closure, even though many of the munitions that made the range unsafe were leftover from Haitian use.²⁷ After a good deal of discussion and consternation, the matter was finally resolved by having explosive ordinance detachment (EOD) personnel do several sweeps of the range, getting the engineers to haul in a large amount of fill dirt to place over portions of the range and put down plastic sheeting to prevent upward leeching of unexploded munitions, and having the US post prominent signs warning Haitians of the dangers of trying to live on or transit the old range. The cost of closure was considerable, and US actions were based on both regulatory grounds and political considerations.

Another example of US activities in Haiti that triggered environmental issues was the weapons buy-back program, a practice that is becoming increasingly common during peacekeeping operations.²⁸ After spending millions of dollars to procure thousands of weapons, including both crew-served and individual weapons, the question became how to dispose of weapons which were unserviceable or those such as automatic weapons

which the US did not want to turn over to the Haitians.²⁹ An early solution to this problem was to take the weapons to pits on the range outside Port-au-Prince and use military explosives to literally blow them to bits. Unfortunately, this method proved both environmentally unsatisfactory and impractical because of the large amounts of explosive necessary to insure that the weapons were completely fragmented into unusable parts. The ultimate solution was to place thousands of weapons in locked shipping containers and transport them to the United States for destruction by melting.³⁰

Other environmental issues that can arise from US activities during contingency operations include disposal of waste generated by the forces themselves. In Haiti, for example, there were relatively few problems with disposing of normal waste in a local dump near Port-au-Prince, other than the thousands of Haitians who eagerly awaited the arrival of the trash trucks. These starving throngs made military escort of trash convoys a necessity to prevent injury to individuals who would attempt to climb on the trucks before they could even leave the compound. However, a significant issue arose when US forces realized that the contractor hired to remove human waste from portable latrines located on the compounds was dumping the waste at an area posing a potential hazard to local water supplies and the Caribbean ocean. There was considerable discussion as to US responsibility for such actions as well as potentially adverse public or press reaction.³¹

A second way that environmental issues can arise during contingency operations stems from environmental problems in the host nation, many of which can directly effect mission accomplishment. Using Haiti again as an example, the stated mission of US forces under the UN mandate was to create a “stable and secure environment” so that the UN could assume the mission restoring and upholding democracy in a country which had undergone a very troubled 200 years.³² One of the early challenges facing US forces entering Haiti was the lack of electricity, particularly in the capital city of Port-au-Prince. This was due to a shortage of fuel and spare parts resulting from the US embargo that had been imposed against General Cedras and his cronies, and from the inability of the restored Haitian government to secure the necessary funds or expertise to fix the problem. The lack of electricity posed a security threat since individuals without electricity were unlikely to have much faith in the restored government or the rule of law. It also exacerbated the environmental problem of deforestation in Haiti since many Haitians continued to destroy trees and brush to obtain the energy necessary for cooking and ordinary living. The only available solution was for US military forces to pay for and help operate the electric generation plants in a project named “Operation Light Switch.”³³

Additionally, sanitation conditions in Haiti were nothing short of deplorable. There was little clean water, virtually no trash or garbage pickup, debris clogged sewer channels and the air was dusty with dried human waste. Government institutions in Haiti either functioned poorly or not at all. There was virtually no law enforcement because the

disbanded Haitian army had also served as the police force, and the judicial structure barely existed. Prison conditions were even worse than conditions in the streets outside. In short, Haiti, like many countries that see US military involvement, was in desperate shape. Many of the problems were environmental and directly affected the ability of the US military to create a "stable and secure environment."

RESOLVING ENVIRONMENTAL ISSUES DURING CONTINGENCIES

Two primary challenges for coordinating complex interagency activities are coordinating policies and programs in Washington and coordinating the implementation of those policies and programs in the host nation. With regard to the first ... [t]hese agencies and department have separate legislative authorities that created and funded them. They each have distinctly different expertise, assets and interests.

Non-Combat Roles for the U.S. Military in the Post Cold-War Era³⁴

There are at least three important steps in resolving environmental issues that arise during contingency operations, thereby promoting both the environmental security interests of the United States and mission accomplishment. First, military and civilian leaders must recognize environmental issues, both from their activities and in the host nation. Second, there must be a clear understanding of who has the responsibility for Humanitarian and Civic Assistance (HCA), including environmental problems, in the host country. Finally, if these problems will be addressed by the United States at all, adequate resources must be provided to the agency charged with resolving them. This is perhaps the most daunting task of all.

Recognizing Environmental Issues

The first step in resolving environmental issues during contingencies is to identify them. As demonstrated by some of the examples from Haiti listed above, this is not always an easy task. Some issues will be complex, such as determining the implications of opening a weapons range or satisfactorily destroying thousands of seized or purchased weapons. Others may be simpler, such as determining where to site a motorpool, how US forces will dispose of waste products, or the effects of heavy military vehicles on local road surfaces. It is important that US forces be environmentally sensitive to these issues to avoid creating negative publicity and to serve as a positive role model for host nation inhabitants. This sensitivity should be based on some of the same considerations that govern unit actions at home station.³⁵ It is important that units deploying on contingency missions include environmental considerations in the planning process and into their operation orders and plans as specified by JCS Publication 4-04 "Joint Doctrine for Civil Engineering Support." Although military exigencies may sometimes dictate military actions during contingencies that have adverse effects on the environment, these should be conscious decisions rather than unintended results.

Recognizing environmental issues in the host nation should be fairly easy. The intelligence assessment process will identify many of these problems early in the planning process as items potentially affecting military operations.³⁶ Those that are not

readily apparent can be gleaned from previous after-action reports, discussions with nongovernmental organizations or by observation during initial deployment. Obviously, the earlier in the process such problems are identified, the greater chance that the deploying force will be able to determine who will deal with these issues and obtain the necessary resources to resolve them.

Assigning Responsibility: The Interagency Process

If finding environmental problems in the host country is fairly easy, affixing the responsibility for solving them is more difficult. If the United States will participate in resolving these problems, they should be considered by the interagency process. However, this can create its own set of difficulties because there may be policy debates between various members of the interagency, such as when the US policy on Haiti was being debated within the Clinton administration.³⁷ There may also be problems associated with the necessity of keeping contingency operations secret that prevent military operators from adequately consulting with civilian agencies.³⁸ Finally, there may be problems by having a number of different levels involved in planning for the contingency operation that prevent the interagency process from working at its best.³⁹ These problems can result in delay and prevent the interagency process from resolving environmental issues, as well as other HCA actions. The end result may be that important issues which affect the ability of the military to create a stable and secure

environment may not get timely action, or may have to be addressed by the military, even though they have little authority or resources to do so.

Adequate Resourcing

The interagency process becomes even more important in considering how to resource initiatives that address environmental problems. Historically, military forces engaged in peace operations were limited in the amount and kind of resources they could expend on humanitarian and civic assistance (HCA).⁴⁰ Although the law has now been clarified to allow some funding of DOD to conduct HCA with the passage of 10 U.S.C. 401 *et seq.*,⁴¹ there are important restrictions that, in practice, have prevented DOD from providing the kind of HCA resources that would allow any significant resolution of environmental issues. First, the HCA must be in conjunction with authorized military operations which promote the security interests and operational readiness skills of the participants. Second, HCA under the statute is generally limited to (1) medical, dental and veterinary care; (2) construction of rudimentary surface transportation, (3) well drilling and construction of basic sanitation facilities, (4) construction of rudimentary public facilities, and (5) mine clearing operations.⁴² Third, the Secretary of State must approve any proposed HCA under this authority. Finally, DOD must report all HCA conducted under this authority to Congress.⁴³ The result of these restrictions has been that deploying military forces have not generally been given many HCA funds, and

instead have had to rely on interagency resources or the ingenuity of military projects having incidental HCA effect.⁴⁴

Superior levels of command who may not want to seek or authorize DOD HCA funds in order to avoid nation-building activities may also be a problem. Military contingency operations are usually undertaken with a specific time period in mind, often based on an assessment of the amount of time for which public support for a particular operation can be sustained. This will be a part of a specific exit strategy. Providing humanitarian and civic assistance or helping a host country resolve environmental issues can easily involve more time and effort than the military may be willing to spend. Even if the military is willing to resolve limited environmental issues, handing off these efforts to civilian agencies can prove difficult and frustrating. In Haiti, for example, the military quickly sought to cease paying for the cost of electricity generation, yet had great difficulty in persuading any federal agency or the Haitian government to assume responsibility for "Operation Light Switch."

Realistic Timing

Even if the interagency process recognizes the need and agrees that civilian agencies need to resolve environmental issues, timely action may be problematic for a number of reasons. First, there may be faulty planning assumptions that hide the need for quick action. In Haiti, for example, it was assumed that once the economic embargo was lifted and US forces were on the ground, international capital would flow into the country and

the nongovernmental organizations would begin large-scale nation building activities. Clearly these assumptions proved to be much too optimistic, as international capital was delayed pending foreign assessment of the security situation in Haiti, and NGO's and PVO's did not have the resources to undertake rebuilding activities on the scale required in Haiti.⁴⁵ Additionally, civilian agencies may be ill equipped to respond quickly. For example, USAID contracts out much of its economic assistance and has little ability to augment in-country staff during an operation.⁴⁶ Thus, despite the obvious need to address environmental problems that have an effect on the military mission, getting such efforts adequately resourced can prove to be a very difficult task.

RECOMMENDATIONS FOR ENHANCING ENVIRONMENTAL SECURITY DURING CONTINGENCY OPERATIONS

Often political issues and concerns influence military operations without considering the military aspects of an operation.

JTF Commander's Handbook for Peace Operations, Feb 28, 1995

As shown in the preceding discussion, environmental issues that arise during contingency operations have not been identified early enough in the planning and interagency process and therefore have not been adequately resourced. Given the frequency with which the US military is likely to be involved in contingency operations, this should change. Listed below are some recommendations that would improve the process, assuming there is sufficient political will to implement them.

Recommendation 1: Recognize and plan for the fact that environmental issues, like other nation-building needs, will arise during contingency operations. Actions by the military force must be carefully analyzed in terms of potential environmental effects. Adverse effects must be minimized as the most effective method of promoting environmental security. Host nation environmental issues can and will affect the ability of the military force to accomplish its mission and comply with its mandate. These issues should be catalogued by their potential to affect stability and security in the host country and prioritized during the interagency process. For example, removing trash or providing reasonable potable water to inhabitants may be just as important as reconstituting government ministries and reviving the criminal justice system. It is important to anticipate these issues and others, such as the need to provide electricity to promote public confidence and security, or the need to train a new police force to provide law enforcement and public protection. Planning must be as early as possible to allow sufficient time to assign responsibility and adequately resource efforts.

Recommendation 2: Improve coordination during the interagency process by reducing security requirements, insuring maximum coordination at all levels, and forcing civilian agencies to respond quickly after military intervention. This will require the military to change its mindset that civilian agencies cannot be trusted during contingency planning, and for civilian agencies to change their mindset that they do not need to match their execution times to those of the military. Early establishment of civil-military

operation planning cells is essential, and ideally, arriving military forces should already know and have coordinated with those civilian agencies who are best positioned to resolve environmental and other HCA issues. In some cases, this will require in-country agencies to augment their staffs. In other cases, it will require military planners and operators to grant appropriate priority to the transportation and communication needs of HCA providers.

Recommendation 3: Adequately resource those participating in contingencies to deal with environmental issues. Deploying military forces should be provided with HCA resources, a portion of which can be used on environmental projects that fit under the statute. Strategic decision makers should recognize that military forces will have to undertake such projects early during a contingency to gain credibility and stability, and should not limit military involvement by assuming that all HCA can be performed by civilian agencies. While it may be important to avoid ‘mission creep,’ strategic decision makers should have enough faith in their military commanders to give them some flexibility in funding needed projects. Arming a joint force commander with HCA authority is just good sense, like giving him a PSYOPS unit to affect public opinion.

Recommendation 4: Most importantly, strategic decision makers need to consider the costs of addressing HCA and environmental issues when deciding whether US intervention is warranted. Enabling deployed military forces to fulfill basic human needs and address some of the most serious environmental issues is much the same as insuring

those forces have the right logistics and the right weapons. Strategic decision makers can avoid "mission creep" by properly defining the mission in realistic terms, not by defining it in narrow of terms that lead to inevitable expansion.⁴⁷

CONCLUSION

Environmental problems can figure as causes of conflict. If we continue on our road to environmental ruin worldwide, they will likely become predominant causes of conflict in the decades ahead.

Norman Myers, Ultimate Security: The Environmental Basis of Political Stability⁴⁸

If environmental security is important to national security, it is important during contingency operations. Yet early recognition of how environmental conditions and problems can affect the security and stability of a country has proven problematic. Fixing responsibility for resolving these problems and resourcing efforts to address them have proven even more difficult. Failing to apply such a methodology has resulted in an *ad hoc* approach where military operators have been forced to undertake HCA projects based on weak force protection rationales. This is not a good way to do business.

If strategic decision makers decide that use of military forces is required, they should be equipped with a full complement of tools necessary to accomplish the mission. This will include the ability to address critical environmental issues that the on-scene commander decides have enough nexus to his mission to warrant the effort and investment. If the commander decides that repairing a water system, clearing trash and

debris or operation of a electrical system is needed, he should have the resources to do so going into the operation. Congress has made it easier for DOD to provide these resources, but if the Haiti operation is any indication, the bureaucracy has been slow to respond.

Finally, the interagency process must become more efficient. Military planners must involve them earlier in the process and civilian agencies must recognize that participation in a military operation is not “business as usual.” They must be prepared to rapidly address critical public needs, including environmental issues, to assist the military exit strategy and long term stability and viability of whatever country we are trying to help. Given the increasing number of such contingency operations as we approach the 21st century, such changes need to be made now to enhance the effectiveness of contingency operations and promote environmental security.

ENDNOTES

¹ National Security Strategy of the United States, Washington, DC, US Government Printing Office, August 1991.

² National Security Strategy of the United States, Washington, DC, US Government Printing Office, 1993

³ A National Security Strategy of Engagement and Enlargement, Washington, DC, US Government Printing Office, February 1996.

⁴ Ibid., at 26.

⁵ Ibid., at 30.

⁶ For an excellent discussion of potential DOD roles in environmental security, see Kent Hughes Butts, Environmental Security: What is DOD's Role?, Strategic Studies Institute, US Army War College, May 28, 1993. A follow on panel discussion is reproduced in another SSI pamphlet, Kent Hughes Butts, ed., Environmental Security: A DOD Partnership for Peace, SSI, US Army War College, April 25, 1994.

⁷ An example is the October 18, 1995, policy memorandum, Subject: Environmental Remediation Policy for DOD Activities Overseas, signed by Deputy Secretary of Defense John White. This policy applies to remediation of environmental contamination on DOD installations or facilities (including DOD activities on host nation installations or facilities) or caused by DOD operations ... occurring within the territory of a nation other than the US. Although it includes training, it specifically exempts operations connected with actual or threatened hostilities, peacekeeping missions or relief operations.

⁸ Ibid. at 26.

⁹ Environmental Quality, 1978 Annual Report on the Environment, Washington: Council on Environmental Quality, Washington, DC, US Government Printing Office, 1978.

¹⁰ When US forces first arrived in Haiti, and for many months afterwards, virtually nothing worked. While part of the poverty and misery of the Haitians was undoubtedly caused by environmental carelessness, governmental ineptitude and the regime of General Cedras, the US embargo of Haiti prior to the military intervention also caused major disruptions to the Haitian economy and many government institutions. There is no doubt, however, that deforestation, which has been estimated to have resulted in the loss of all but 2 percent of Haiti's forests, has caused agricultural disruption and climatic change that may take generations to restore.

¹¹ "American Diplomacy and the Global Environmental Challenges of the 21st Century", Speech by Secretary of State Warren Christopher, Stanford University, April 9, 1996.

¹² The US is a party to numerous international agreements and treaties concerning the environment. For example, the US has signed both the U.N. Declaration on Environment and Development, June 14, 1992, U.N. Doc. A/CONF.151/5/Rev. 1 (1992) reprinted in 31 I.L.M. 876 (1992), (the Rio Declaration), and the Declaration of the U.N. Conference on the Human Environment, June 16, 1972, U.N. Doc. A/CONF.48/14/Rev.1 (1973), reprinted in 11 I.L.M. 1416 (1972), (the Stockholm Declaration). The US has also signed multilateral agreements such as the U.N. Framework Convention on Climate Change, May, 9, 1992, U.N. Doc. A/AC.273/18 (Part II)/Add.1 and Corr.1 (1992), reprinted in 31 I.L.M. 849 (1992) and subsequently ratified by the US Senate on October 15, 1992. Provisions of the agreement have been enacted into US law. See e.g., National Climate Program Act, U.S. Code, vol. 15, sections 2901-2908, and the Global Climate Protection Act of 1987, Pub. L. 100-204, 101 Stat. 1407.

¹³ For example, the US signed and ratified the Agreement on the Conservation of Polar Bears, Nov 15, 1973, 27 U.S.T. 3918, T.I.A.S. No. 8409, which entered into force for the United States on November 1, 1976.

¹⁴ See e.g. the North American Agreement on Environmental Cooperation, (NAAEC of the NAFTA Environmental Supplemental Agreement, Sept 13, 1993, reprinted in 32 I.L.M. 1480 (1993) 33 Int'l Env't Rep 0101 (1994) and the North American Agreement on Labor Cooperation, (NAALC or the NAFTA Labor Supplemental Agreement) Sept 13, 1993, reprinted in 32 I.L.M. 1500 (1993). There are also numerous Canada/US agreements such as the U.S.-Canada Memorandum of Intent Concerning

Transboundary Air Pollution, Aug 5, 1980, U.S.-Canada, 32 U.S.T. 2521, and the Agreement on Air Quality in 1991 in Ottawa, reprinted in 30 I.L.M. (1991).

¹⁵ The Army, for example, has stewardship over more than 20 million acres of land at military installations and civil works projects. This represents some two-thirds of DOD lands.

¹⁶ For an excellent discussion of DOD's land management challenges and successes, *See* Kent Hughes Butts, Environmental Security: What is DOD's Role?, SSI, US Army War College May 28, 1993. Professor Butts notes that DOD plays a vital role in proper management of habitat, protection of natural resources such as endangered species, environmental restoration of damaged areas, prevention of pollution, reduction of hazardous waste and environmental compliance.

¹⁷ Mission Statement, Office of the Deputy Under Secretary of Defense for Environmental Security, INTERNET: <<http://www.acq.osd.mil/ens/>>, last modified on January 8, 1997, accessed on January 13, 1997.

¹⁸ In some cases, however, such as the ocean dumping prohibition in the Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA), as amended, U.S. Code, vol. 33, sections 1401-1445 (implementing the London Dumping Convention), Congress has expressed its intent to apply US law outside territorial US borders.

¹⁹ Cases which find this judicial presumption include, Foley Brothers v. Filardo, 69 S.Ct. 575 (1949) (suit over application of US federal 8 hour wage law to American citizens working overseas); E.E.O.C. v. Arabian American Oil Co. (ARAMCO), 111 S.Ct. 1227 (1991), alleged discrimination in violation of Civil Rights laws; and Smith v. United States, 113 S.Ct. 1178 (1993), suit over applicability of waiver of sovereign immunity to FTCA suit arising in Antarctica.

²⁰ For example, Wilderness Society v. Morton, 63 F. 2d 1261 (D.C. Cir. 1972), assumed that the National Environmental Policy Act applied abroad; Enewetak v. Laird, 365 F.Supp. 811 (D. Haw. 1973) and Siapan ex rel. guerrero v. United States Department of the Interior, 365 F. Sup 645 (D. Haw. 1973) applied NEPA to US trust territories; and in Sierra Club v. Adams, 578 F. 2d 389 (D.C. Cir. 1978), the US did not contest application of NEPA to highway project in Columbia and Panama.

²¹ *See e.g.*; Nuclear Resources Defense Council (NRDC) v. Nuclear Regulatory Commission, 647 F. 2d 1345 (D.C. Cir. 1981) attempt to block sale of nuclear reactor to Philippines; Greenpeace USA v. Stone, 748 F. Supp. 749 (D. Haw. 1990) attempt to block removal of chemical munitions from Germany and transport them to Johnston Atoll; and NEPA Coalition of Japan v. Aspin, 837 F. D.D.C. 1993) attempt to force SECDEF to do an EIS on US Japanese bases; *But See*, Environmental Defense Fund, Inc. v. Massey, 986 F.2d 528 (D.C. Cir. 1993) exception allowing NEPA application to Antarctica because no other law applies.

²² Executive Order (EO) 12114, Environmental Effects Abroad of Major Federal Actions (January 4, 1979). The EO does not require formal environmental analysis or documentation for base operations, construction, realignments or operations/training. *See also* Department of Defense Directive 6050.7, Environmental Effects Abroad of Major Federal Actions, (March 31, 1979) implementing EO 12114.

²³ Other exceptions include actions taken by the President or members of his cabinet, actions taken at the direction of the President when national security or interests are involved, some activities of intelligence components, and actions taken with respect to arms transfers to foreign nations. The degree to which EO 12114 might be applicable to contingency operations that might not be considered as occurring in the course of armed conflict, has not been completely resolved. For example, proposed draft comments for the Army's review of a new DOD Directive implementing EO 12114, called DODI 4715.II, Analyzing Defense Actions with the Potential for Significant Environmental Impacts Outside the United States, notes that the new instruction fails to indicate DOD's responsibilities during contingency operations not occurring in the course of armed conflict. Nor does the proposed instruction address the need for environmental analysis when the US takes part in UN sponsored operations or operations in response to a UN resolution. Thus, there appears to be concern that the new instruction might be interpreted as

extending the environmental analysis provisions of EO 12114 to these type of operations. What comes out of the staffing process remains to be seen.

²⁴ Department of Defense Directive 6050.16, DOD Policy for Establishing and Implementing Environmental Standards at Overseas Installations, (September 20, 1991).

²⁵ This document was prepared by a DOD Overseas Environmental Task Force in 1992 to help various Executive Agents set standards for overseas DOD installations by comparing US law and host nation laws in areas such as air emissions, drinking water, wastewater, hazardous materials, hazardous waste, solid waste, medical waste management, petroleum oil and lubricants, noise, pesticides, historic and cultural resources, endangered species and natural resources, polychlorinated biphenyl's, asbestos, radon, and underground storage tanks. These final governing standards are issued to DOD installations, and absent a DOD waiver, become the compliance baselines for these installations. In general, standards are usually the stricter of host nation or US laws, rules or regulations.

²⁶ Such installations are defined in the OEBGD as those "that have been assigned a unique DOD installation/station code as defined by Military Department regulations issued pursuant to DOD Instruction 4165.14.

²⁷ At issue were provisions of Army Regulation 405-90, Disposal of Real Property, and Army Regulation 385-64, Ammunition Standards. Paragraph 2-2 of AR 405-90 provides in pertinent part that the general public must be safeguarded from hazards from ammunition or explosives on contaminated real property under DA control. Together with AR 385-64, requests to close a range are to be forwarded to the Department of Defense Explosives Safety Board. While it might have been argued that the range in Haiti was not real property under DA control in the sense of a firing range on a permanent installation or facility, given the potential for claims or negative public opinion from having a civilian Haitian injured by unexploded ordnance at the range, the various levels of command involved decided that it was better to act as though the range was DA real property and apply the full spectrum of public protection to its closure.

²⁸ In the typical scenario, the US military will offer cash for weapons on a sliding scale. The more dangerous the weapon, the more cash is paid for its surrender. As the operation continues, the price paid for weapons may decline, on the theory that peacekeepers do not want to make it profitable to either import weapons or steal them. The program in Haiti led to the seizure of more than 30,000 weapons at a cost of more than 2 million dollars.

²⁹ Some automatic weapons were provided to Haitians for a special reaction force, however, the number of automatic weapons obtained through the weapons buy back program far exceeded the number that US forces thought prudent to redistribute.

³⁰ The process of inventorying and getting US Customs to clear the weapons for import into the United States proved to be an interesting and fairly cumbersome process, to say the least.

³¹ At issue was whether potential pollution of the Caribbean ocean by the contractor could be a potential US violation of the ocean dumping provisions of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter. Dec 29, 1972, 26 U.S.T. 2403, 1046 U.N.T.S. 120, reprinted in 11 I.L.M. 1294 (1972). It was ultimately decided that this was not a US responsibility, although additional discussion were held with the contractor concerning better disposal methods.

³² The relevant portion of UN Resolution 940, July 31, 1994, states:

4. Acting under Chapter VII of the Charter of the United Nations, authorizes the Member States to form a multinational force under unified command and control an, in this framework, to use all necessary means to facilitate the departure from Haiti of the military leadership, consistent with the Governor's Island Agreement, the prompt return of the legitimately elected President and the restoration of the legitimate authorities of the Government of Haiti, and *to establish and maintain a stable and secure environment* that will permit implementation of the Governor's Island Agreement, on the understanding that the cost of implementing this temporary operation will be borne by the participating Member States.(emphasis added).

³³ There was little authority for the US military to undertake such an operation using normal operating funds. There was really no choice, however, because other federal agencies were unable or unwilling to fund the project, and the Haitian government treasury had been looted by General Cedras leaving no money to pay for fuel.

³⁴ James R. Graham, ed., Supporting Democracy, Non-Combat Roles for the US Military in the Post Cold-War Era, Institute for National Strategic Studies, Washington, DC, 1993, 75-76.

³⁵ Prevention of environmental problems has taken center stage at military activities and installations. The emphasis now is on pollution prevention, proper waste management, participation in ecosystem management and responsible environmental practices. Just as private corporations, DOD has found that prevention actions can be cheaper than paying fines or expensive remediation efforts, create much better public relations with surrounding communities, and can be more politically feasible in terms of resourcing. The lesson for deployments or contingency operations is obvious, it may be far better to minimize or prevent an environmental issue than it is to correct one or clean-up an area.

³⁶ In Haiti, for example, environmental problems directly affected the health of the force and governed actions as diverse as the contents of General Order Number 1 to a host of healthcare issues. Environmental degradation mandated no access to local food or water by other than SOF forces, no sexual and exceptionally limited social contact and the necessity to provide soldiers with things such as rubber gloves in light of the potential AIDS threat. As a result, virtually every bit of food and water ingested by soldiers was imported from off-island, most of it from the US mainland.

³⁷ During eleven months preceding the Haiti operation, the US approach changed from a small peace-keeping force to preparation for use of force to a final decision to use force. Interagency policy difference also contributed to problems. Publicly, administration policy was to use diplomatic means to return President Aristide to power. At the same time, the National Security Council favored the use of military force. DOD was not in favor of using force, but US Atlantic Command began planning a contingency operation anyway.

³⁸ In Haiti, for example, military planning was tightly compartmentalized. Planning for a forced entry operation (Plan 2370) was being handled by 18th Abn Corps and began in May 1994. Planning for a permissive entry option (Plan 2380) was being handled by the 10th Mountain Division (Light) and began in July 1994. Not only were military planners not adequately coordinating with civilian agencies in an effort to maintain security, they may not have been coordinating with each other.

³⁹ For example, the Special Operations/Low Intensity Conflict (SOLIC) organization under Secretary Perry took steps to establish a Civil-Military Operations Center in the Spring of 1994. AID's Office of Disaster Assistance (OFDA) began working with SOLIC in the summer of 1994. AID's Office of Transition Initiatives began planning for its participation in Haiti in May 1994. Yet there was very little coordination among the agencies and until the 10th Mountain Division (Light)'s plan began development in July 1994, little coordination between the military and civilian agencies. Although OFDA did visit Ft. Drum for 10 days prior to the Haiti operation, much of the interagency coordination at the tactical level did not take place until troops were actually on the ground in Haiti.

⁴⁰ Prevailing law as espoused by the General Accounting Office in its famous *Honduras I* and *Honduras II* opinions was that mission dollars could only be spent on HCA if it was an incidental benefit to an otherwise valid expenditure. Thus, the GAO stated that "[t]he mere fact that O&M-funded activities create an incidental civic or humanitarian benefit does not require that they be financed from other appropriations." *Honduras II* at 38.

⁴¹ First passed as DOD Appropriations Act, 1995, Pub. L. No. 103-335, Title II, 108 Stat. 2599, 2606 (1994). Now both DOD and the State Department get separate funding for HCA projects. Congress has thus eliminated the ability of DOD to do any significant HCA funding from regular mission accounts, except to the extent that the HCA projects are incidental to normal military activities such as force protection.

⁴² The kinds of environmental problems that might fit under this rubric is unclear. For example, could military forces legitimately operate public utilities, pick up and remove trash or clear storm systems?

⁴³ This analysis is drawn from the 1996 Operational Law Handbook, an annually updated publication of The Judge Advocate General's School. As noted in Chapter 12, page 12-9, there are additional restrictions in the statute such as those that prevent giving HCA aid to indigenous foreign military forces

⁴⁴ In some cases, CINC initiative funds might also be available for HCA projects. 10 U.S.C. 166.

⁴⁵ As a simple example, there was not one single working traffic signal in the entire city of Port-au-Prince, making travel around the city both frustrating and exhausting, even for those in military vehicles who could force the right of way.

⁴⁶ Another problem may be that USAID operates under tight legislative authority and fiscally constrained budgets. The agency may not have many discretionary funds for unplanned activities during contingency operations that suddenly arise. Thus, the more notice provided, the better.

⁴⁷ There is always the real danger that commanders may get distracted from their real mission. In Somalia, for example, the Center for Army Lessons Learned noted in its 93-8 Newsletter that:

The severity of human suffering in Somalia caused commanders to try and alleviate the situation on their own. Units were deployed to the field to provide security for the humanitarian relief agency convoys of food. upon realizing they were not tasked to give food or provide direct support to the population, local commanders took it upon themselves to try and arrange for or speed up relief supplies. While well intended, this activity diverted commanders' attention from their primary mission. Joint Pub 3-07, Chapter 3, Joint Doctrine for Military Operations other than War, June 16, 1995.

While this may be a valid observation for Somalia, it is may not be all that relevant when the mission of the contingency force is to "create a stable and secure environment."

⁴⁸ Norman Myers, Ultimate Security: The Environmental Basis of Political Stability, W.W. Norton & Company, 1993, 17.

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